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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/613,078 | 07/01/2003 | John S. Patton | 0005.16 | 6971 |

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NEKTAR THERAPEUTICS
150 INDUSTRIAL ROAD
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EXAMINER

KISHORE, GOLLAMUDI S

ART UNIT PAPER NUMBER

1615

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/613,078 | PATTON ET AL. | |
| | Examiner | Art Unit | |
| | Gollamudi S. Kishore, Ph.D | 1615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26, 28-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26, 28-31 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment dated 3-6-06 is acknowledged.

Claims included in the prosecution are 26, 28-31 and 33-35.

The amendment dated 6-10-05 is acknowledged.

Claims included in the prosecution are 26, 28-31 and 33-35.

In view of the terminal disclaimers, the double patenting rejections are withdrawn.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26, 28-29 and 31, 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platz cited above.

Platz's disclosure relates to inhalation therapy involving the administration of a drug in aerosol form to the respiratory tract. According to Platz, "the present invention is useful for transforming polypeptide drugs into a powder form that is suitable for aerosol administration (col. 2, lines 13-15). Examples of such polypeptides include, inter alia,

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insulin (col. 2, line 21). The dry powder compositions further include pharmaceutical carriers such as lactose and trehalose (col. 2, line 51). Platz discloses a two-step where the first step in the process for forming the polypeptides into micronized particles is lyophilization of buffer solution (col. 2, lines 38-40; col. 6, lines 4-5). Subsequently, the lyophilized polypeptide is size reduced in a grinding mill, preferably a fluid energy mill also known as a jet mill (col. 3, lines 3-5). The particle size of the milled powder disclosed by Platz appears to be essentially the same as the particle sizes recited in instant claims (Platz, col. 3, line 65 through col. 4, line 19). Thus, it would appear that Platz discloses a stable, dry powder insulin composition containing amorphous particles having a particle size essentially the same as the particle size recited in claim 26 (see also instant specification, page, 9, lines 20-31, in this regard). The burden is therefore, upon applicant to show that instant particles are patentably distinct from those disclosed by Platz. Assuming that they are different since Platz is directed to the same inhalation therapy using particles of insulin, it is deemed obvious to manipulate the teachings of Platz that is using spray drying instead of lyophilization to obtain the best possible particles.

Applicant's arguments have been fully considered, but are not found to be persuasive. Applicant argues that claims 26 and 31 for example, are to a stable, dry powder insulin composition produced by a method comprising dissolving insulin in an aqueous buffer to form a solution, adding a pharmaceutical carrier to the solution, and spray drying the solution to produce substantially amorphous particles, wherein the insulin is present in the particles at from 15 to 80 % by weight and that the positively

recited features are absent in the teachings of Platz et al. according to applicant, Platz et al teach that it is desirable to produce compositions where a polypeptide is present at less than 10 % of the total solids and that the examples of Platz et al show low percentages. These arguments are not persuasive. As pointed out in the previous action in response to applicant's arguments that human serum albumin and NaCl are present in 'significantly larger quantities than the active agent, the examiner pointed out that there is nothing in Platz to indicate that human serum albumin and NaCl are 'components other than active agent' and not bulking agents. Therefore, the examiner still holds the position that Platz's teachings of 50 to 99.99 % bulking agents could still imply that the rest could be the active agent (50 to 0.001 %). Furthermore, as applicants themselves state that Platz teaches the administration of the active agent 'neat'. Based on this teaching by Platz, that is 100 % active agent can be administered as such and based also on Platz that 50 to 99.00 % bulking agent could be used it would be prima facie obvious to one of ordinary skill in the art that the amounts of the active agent and the bulking agent can be varied.

3. Claims 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platz cited above, in combination with Chien (5,042,975) also of record.

The teachings of Platz have been discussed above. What is lacking in Platz is the teaching of the use of citrate as the buffer for insulin. Such a use however, would have been obvious to one of ordinary skill in the art, with a reasonable expectation of success, since Chien teaches that citrate is a commonly used buffer in combination with insulin (example 3 on col. 17).

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Applicant's arguments have been fully considered, but are not found to be persuasive. Arguments regarding Platz have been addressed above. Applicant provides no specific arguments regarding Chien. The rejection is maintained.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

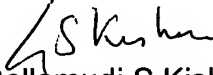
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gollamudi S. Kishore, Ph.D whose telephone number is (571) 272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gollamudi S Kishore, Ph.D
Primary Examiner
Art Unit 1615

GSK